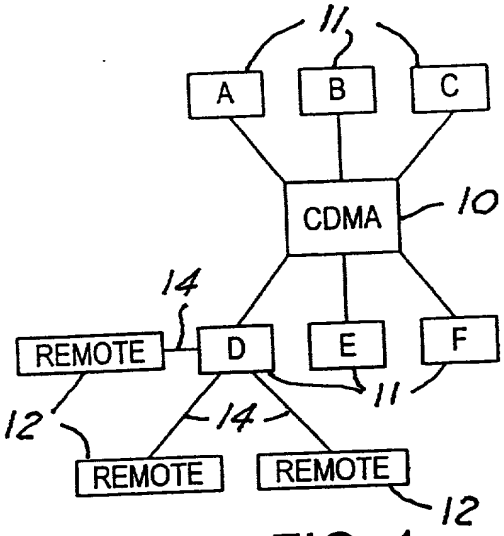
11
A
B
C
CDMA
10
14
REMOTE
D
E
F
11
12
14
REMOTE
REMOTE
12

FIG. 1

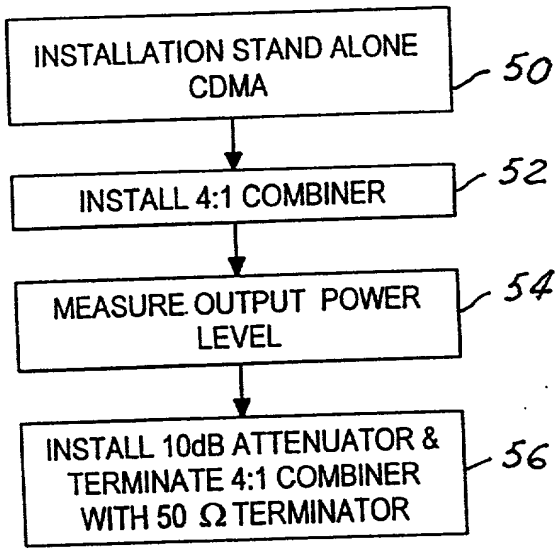
INSTALLATION STAND ALONE CDMA
50
INSTALL 4:1 COMBINER
52
MEASURE OUTPUT POWER LEVEL
54
INSTALL 10dB ATTENUATOR & TERMINATE 4:1 COMBINER WITH 50 Ω TERMINATOR
56

FIG. 5

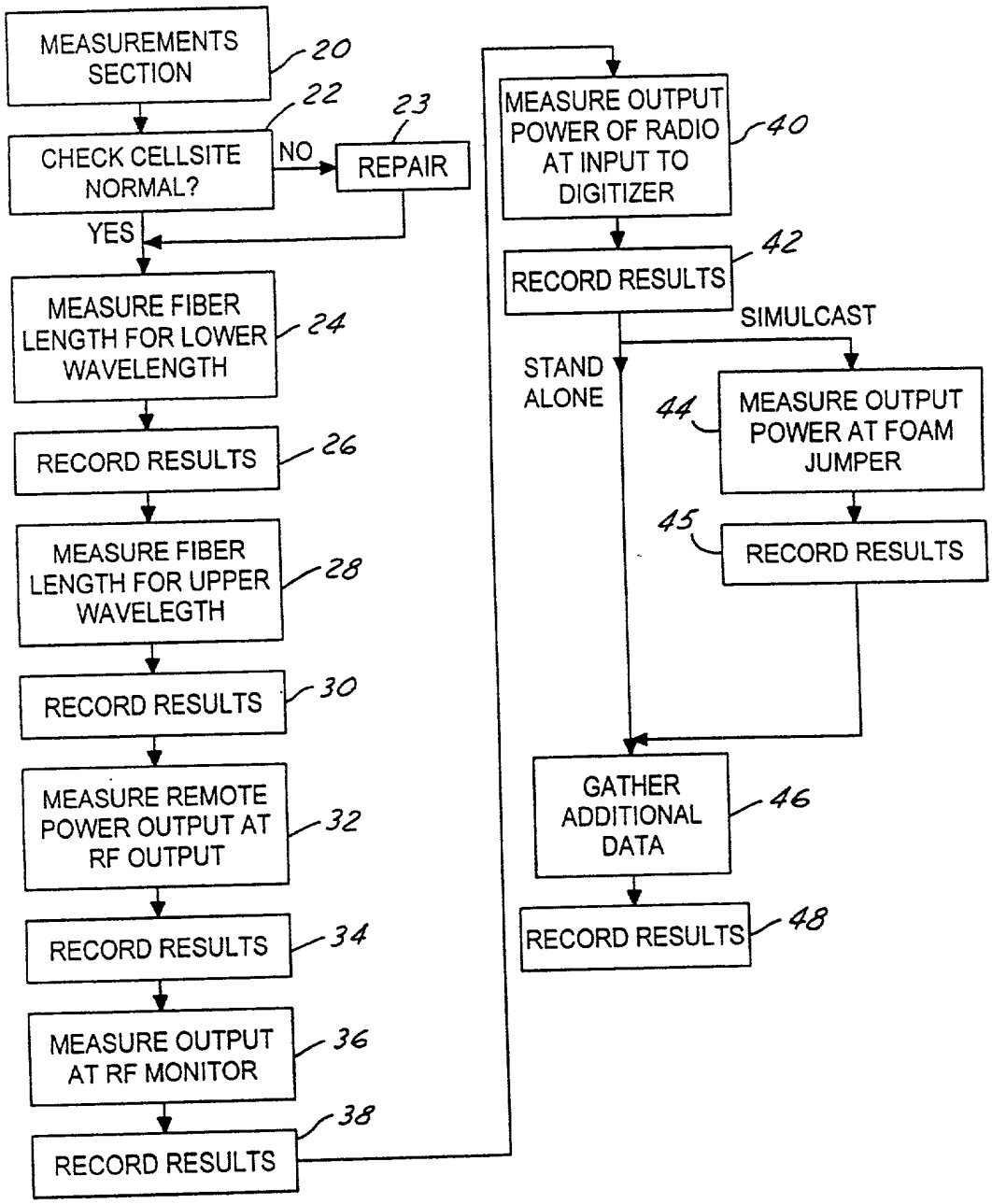
MEASUREMENTS SECTION
20
CHECK CELLSITE NORMAL?
22
NO
23
REPAIR
YES
MEASURE FIBER LENGTH FOR LOWER WAVELENGTH
24
RECORD RESULTS
26
MEASURE FIBER LENGTH FOR UPPER WAVELEGTH
28
RECORD RESULTS
30
MEASURE REMOTE POWER OUTPUT AT RF OUTPUT
32
RECORD RESULTS
34
MEASURE OUTPUT AT RF MONITOR
36
RECORD RESULTS
38
MEASURE OUTPUT POWER OF RADIO AT INPUT TO DIGITIZER
40
RECORD RESULTS
42
SIMULCAST
STAND ALONE
44
MEASURE OUTPUT POWER AT FOAM JUMPER
45
RECORD RESULTS
GATHER ADDITIONAL DATA
46
RECORD RESULTS
48

FIG. 2

Microcell Data Sheet
Standalone and Standalone Simulcast Configuration

Call Site: _____
Face: _____
Date: _____

		Remote 1	Remote 2	Remote 3	Remote 4	Remote 5
	Measurements Section					
24	Fiber Distance 1310 nm (kft):					
28	Fiber Distance 1550 nm (kft):					
	Attenuator Value Used For Pout Mess. @ Remote (dB):					
32	Pout @ Remote Antenna (dBm):					
	Pout @ Remote Antenna For 1 Radio Incl. Atten. (dBm):					
36	Pout @ Remote RF Monitor (dBm):					
40	Pin @ Digitizer For 1 Analog Radio (dBm):					
	Total # Radios On Face (Incl. CDPD & Setup):					
	Radios In CDMA Bandwidth					
46	LPA Attenuation:					
	TX RIM Setting:					
	RX RIM Setting:					
	Digitizer Rev. #.					
	PN Offset					

	Calculations Section					
82	Transmit Propagation Delay Calculation					
84	Transmit Propagation Delay Translation Value					
88	Receive Propagation Delay Calcutation					
90	Receive Propagation Delay Translation Value					
94	Maximum Differential Delay Calculation					
95	Maximum Differential Delay Value	0.0				
98	Sector Size Calculation					
102	Cell Search Window Size Calculation					
106	Analog Composite Power To Digitizer					
108	Total Gain Check Calculation					
112	Actual Gain Check Calculation					
116	CDMA Pin @ Digitizer Pilot Only					
120	Total Power @ Digitizer (CDMA & Anolog)					

	Translations Section	
84	Transmit Antenna Propagation Delay (microseconds)	
90	Receive Antenna Propagation Delay (microseconds)	
102	Search Window Size: Call (microseconds)	
98	Sector Size (miles)	
	Maximum Differential Transmit Delay (microseconds)	0.0
	Initial Power Offset for Access	-5
	Access Probe Power Incremen(dB)	4
	BCR Attanuation (dB)	6
	Access Channel Preamble Length (frames)	2
	Time Randomization for Access Channel Probes	6
	Eb/No Setpoint - Minimum (dB) Rate Set 2	5.0
	Eb/No Setpoint - Maximum (dB) Rate Set 2	9.8
	Max Pwr	25.0

Cell Site Tx Delay	22.8
Cell Site Rx Delay	14.0

	Rev 1	Rev 2
Microcell Tx Delay	1	8
Microcell Rx Delay	3	17

FIG. 3

Microcell Data Sheet
Simulcast Configuration

Call Site: _____
Face: _____
Date: _____

		Remote 1	Remote 2	Remote 3	Remote 4	Remote 5
	Measurements Section					
24	Fiber Distance 1310 nm (kft):					
28	Fiber Distance 1550 nm (kft):					
	Attenuator Value Used For Pout Mess. @ Remote (dB):					
32	Pout @ Remote Antenna (dBm):					
	Pout @ Remote Antenna For 1 Radio Incl. Atten. (dBm):					
36	Pout @ Remote RF Monitor (dBm):					
40	Pin @ Digitizer For 1 Analog Radio (dBm):					
44	Pout @ Foam Jumper For CDMA on Macroface					
	Total # Radios On Face (Incl. CDPD & Setup):					
	Radios In CDMA Bandwidth					
	LPA Attenuation:					
46	TX RIM Setting:					
	RX RIM Setting:					
	Digitizer Rev. #.					
	BCR Setting:					
	PN Offset					

	Calculations Section					
82	Transmit Propagation Delay Calculation					
86	Transmit Propagation Delay Translation Value	22.8				
88	Receive Propagation Delay Calcutation					
92	Receive Propagation Delay Translation Value	14.0				
94	Maximum Differential Delay Calculation					
95	Maximum Differential Delay Value	0.0				
98	Sector Size Calculation					
102	Cell Search Window Size Calculation					
106	Analog Composite Power To Digitizer					
108	Total Gain Check Calculation					
112	Actual Gain Check Calculation					
116	CDMA Ideal Power Level Calculation					
120	Total Power @ Digitizer (CDMA & Anolog)					

	Translations Section	
	Transmit Antenna Propagation Delay (microseconds)	22.8
	Receive Antenna Propagation Delay (microseconds)	14.0
102	Search Window Size: Call (microseconds)	
98	Sector Size (miles)	
	Maximum Differential Transmit Delay (microseconds)	0.0
	Initial Power Offset for Access	-5
	Access Probe Power Incremen(dB)	4
	Access Channel Preamble Length (frames)	2
	Time Randomization for Access Channel Probes	6
	Eb/No Setpoint - Minimum (dB) Rate Set 2	5.0
	Eb/No Setpoint - Maximum (dB) Rate Set 2	9.8
	Max Pwr	

Cell Site Tx Delay	22.8
Cell Site Rx Delay	14.0

	Rev 1	Rev 2
Microcell Tx Delay	1	8
Microcell Rx Delay	3	17

FIG. 4

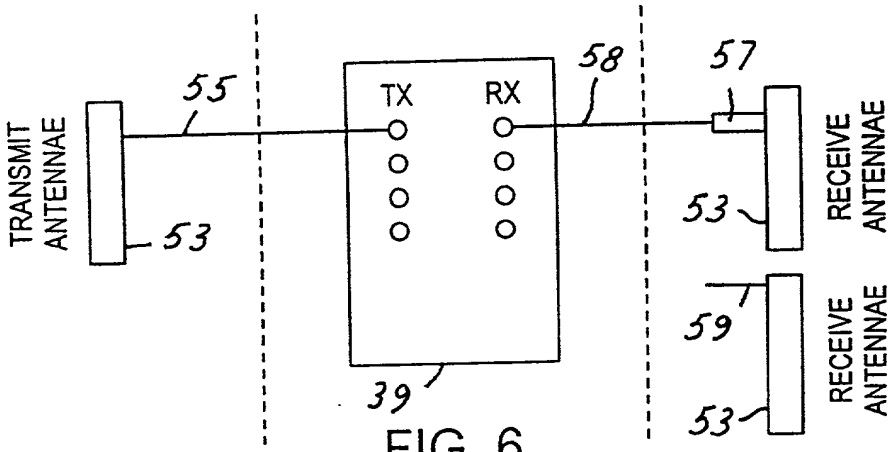
TRANSMIT ANTENNAE
55
53
TX
RX
58
57
RECEIVE ANTENNAE
53
59
RECEIVE ANTENNAE
53
39

FIG. 6

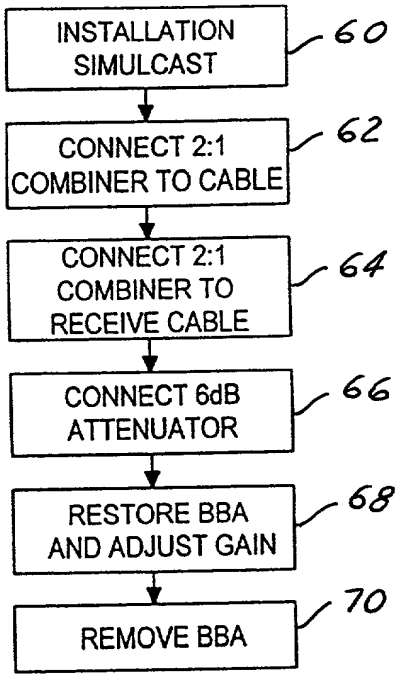
INSTALLATION SIMULCAST
60
CONNECT 2:1 COMBINER TO CABLE
62
CONNECT 2:1 COMBINER TO RECEIVE CABLE
64
CONNECT 6dB ATTENUATOR
66
RESTORE BBA AND ADJUST GAIN
68
REMOVE BBA
70

FIG. 7

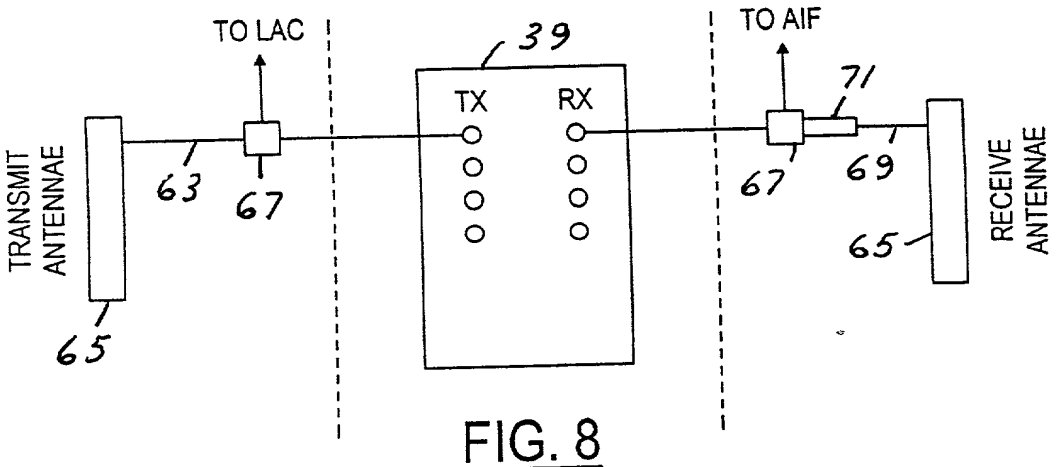
TO LAC
39
TO AIF
TX
RX
71
TRANSMIT ANTENNAE
63
67
67
69
65
65
RECEIVE ANTENNAE

FIG. 8

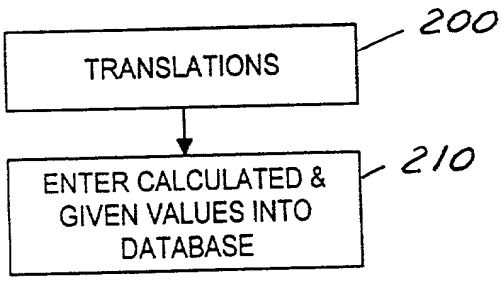
200
TRANSLATIONS
210
ENTER CALCULATED & GIVEN VALUES INTO DATABASE

FIG. 10

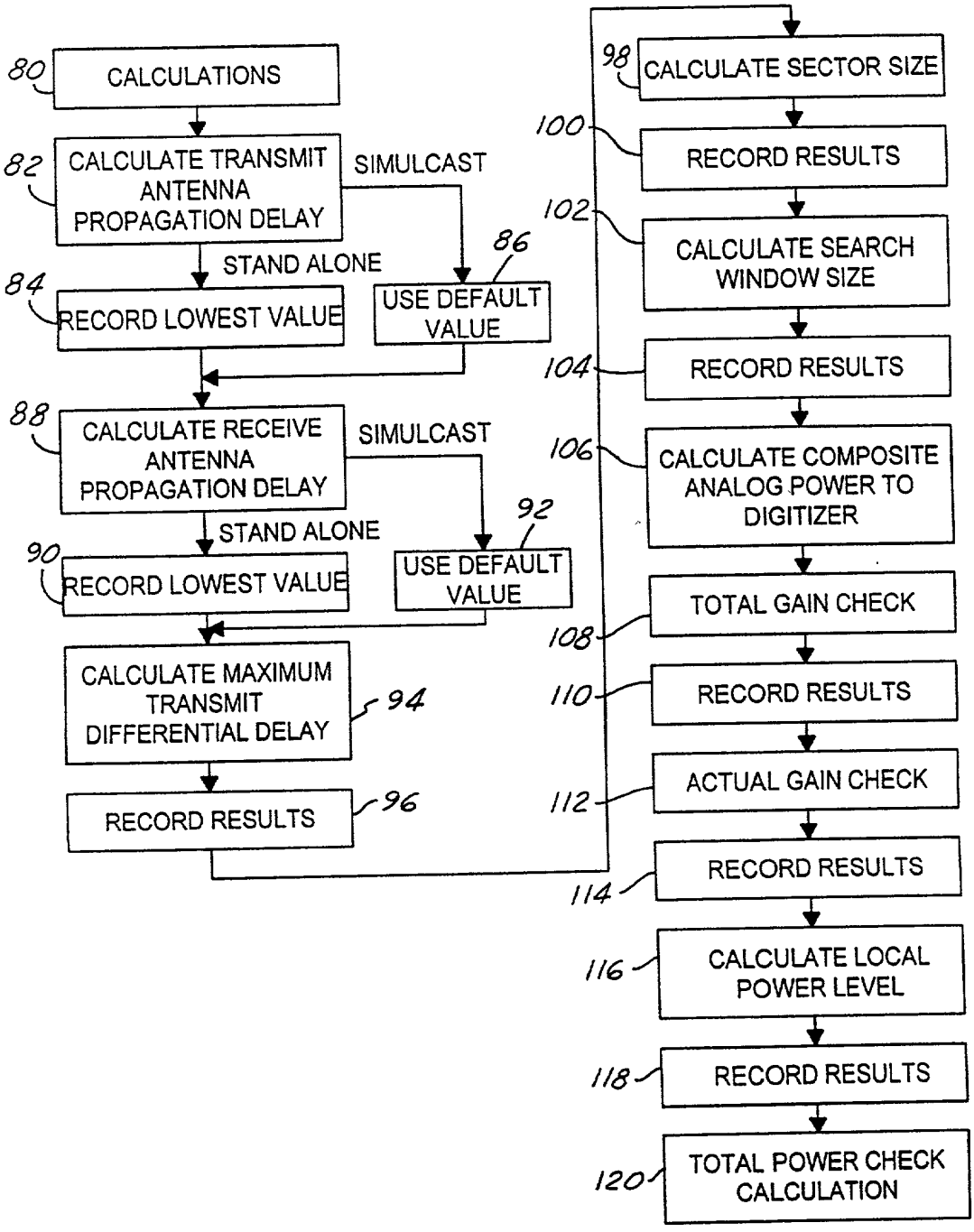
80
CALCULATIONS
82
CALCULATE TRANSMIT ANTENNA PROPAGATION DELAY
SIMULCAST
STAND ALONE
84
RECORD LOWEST VALUE
86
USE DEFAULT VALUE
88
CALCULATE RECEIVE ANTENNA PROPAGATION DELAY
SIMULCAST
STAND ALONE
90
RECORD LOWEST VALUE
92
USE DEFAULT VALUE
CALCULATE MAXIMUM TRANSMIT DIFFERENTIAL DELAY
94
RECORD RESULTS
96
98
CALCULATE SECTOR SIZE
100
RECORD RESULTS
102
CALCULATE SEARCH WINDOW SIZE
104
RECORD RESULTS
106
CALCULATE COMPOSITE ANALOG POWER TO DIGITIZER
TOTAL GAIN CHECK
108
110
RECORD RESULTS
ACTUAL GAIN CHECK
112
RECORD RESULTS
114
116
CALCULATE LOCAL POWER LEVEL
118
RECORD RESULTS
120
TOTAL POWER CHECK CALCULATION

FIG. 9

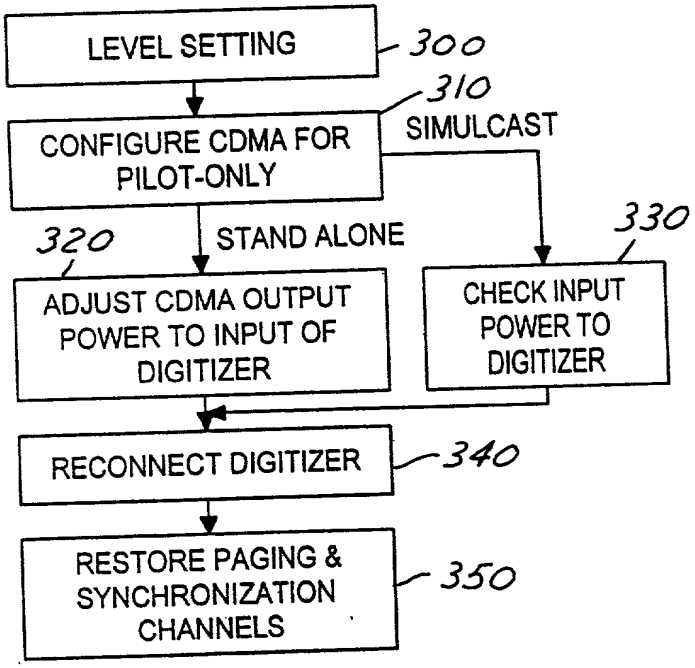
LEVEL SETTING
300
CONFIGURE CDMA FOR PILOT-ONLY
310
SIMULCAST
STAND ALONE
320
330
ADJUST CDMA OUTPUT POWER TO INPUT OF DIGITIZER
CHECK INPUT POWER TO DIGITIZER
RECONNECT DIGITIZER
340
RESTORE PAGING & SYNCHRONIZATION CHANNELS
350

FIG. 11

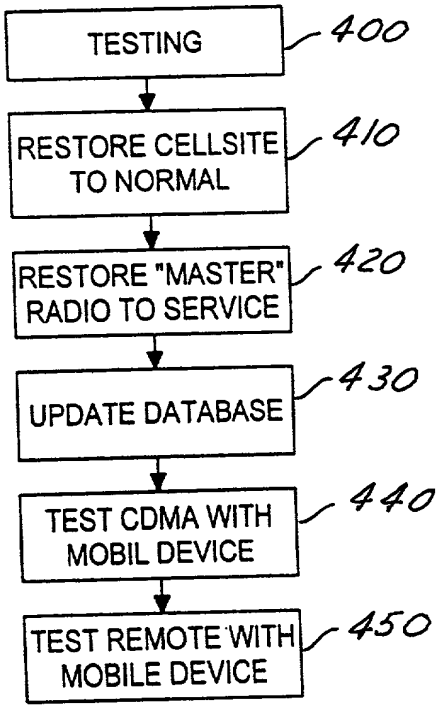
TESTING
400
RESTORE CELLSITE TO NORMAL
410
RESTORE "MASTER" RADIO TO SERVICE
420
UPDATE DATABASE
430
TEST CDMA WITH MOBIL DEVICE
440
TEST REMOTE WITH MOBILE DEVICE
450

FIG. 12